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(54) **HIGH QUALITY CLOSED-LOOP ULTRASOUND IMAGING SYSTEM**

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See application file for complete search history.

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(57) **ABSTRACT**

A closed-loop ultrasound system includes an ultrasound receiver, an ultrasound transmitter at least one of integral with or at a predetermined position relative to the ultrasound receiver, and a trigger circuit configured to receive detection signals from the ultrasound receiver and to provide trigger signals to the ultrasound transmitter in response to received detection signals. The ultrasound transmitter is configured to transmit ultrasound energy in response to the trigger signals.

36 Claims, 15 Drawing Sheets